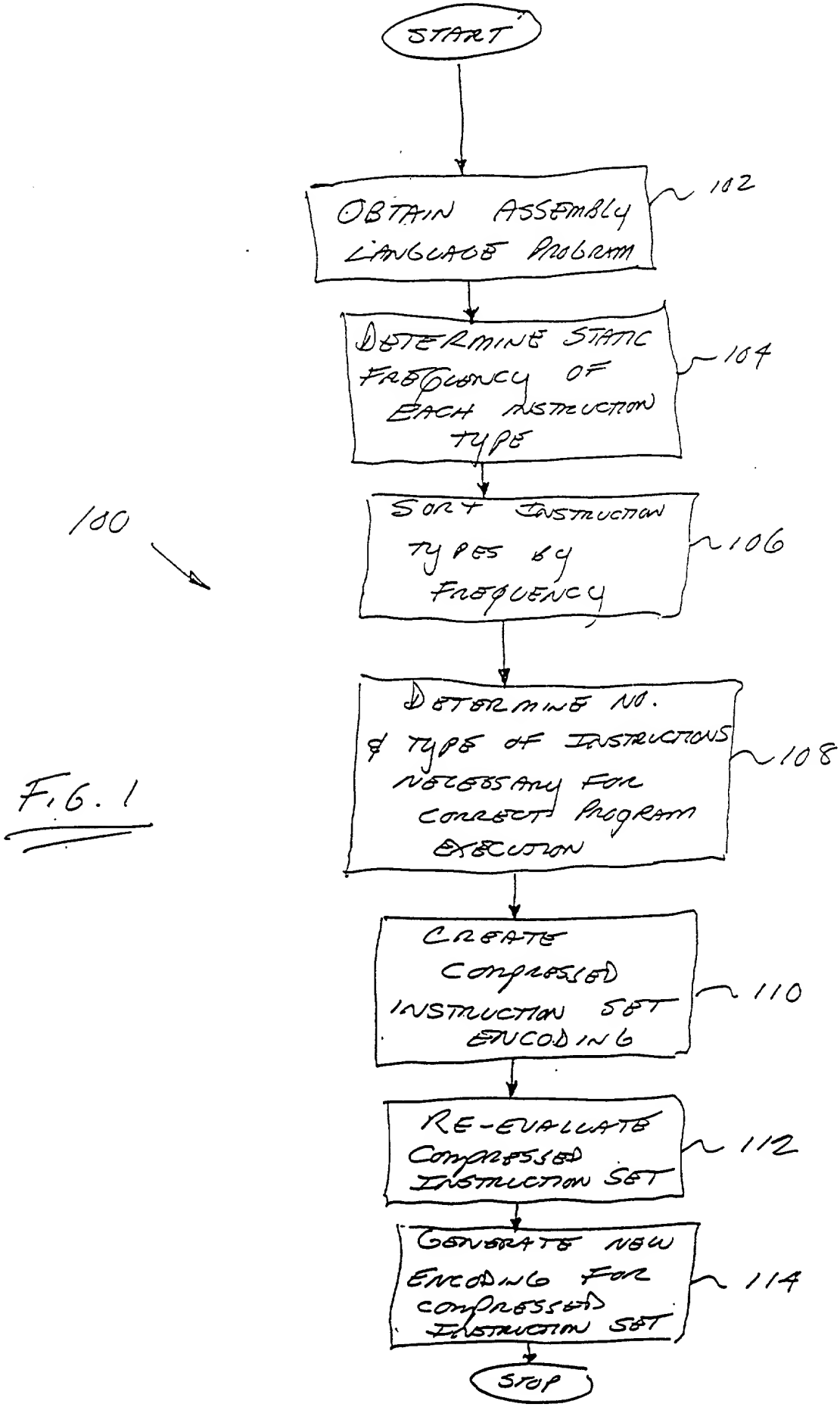

START
OBTAIN ASSEMBLY LANGUAGE PROGRAM
102
DETERMINE STATIC FREQUENCY OF EACH INSTRUCTION TYPE
104
100
SORT INSTRUCTION TYPES BY FREQUENCY
106
DETERMINE NO. & TYPE OF INSTRUCTIONS NECESSARY FOR CORRECT PROGRAM EXECUTION
108
CREATE COMPRESSED INSTRUCTION SET ENCODING
110
RE-EVALUATE COMPRESSED INSTRUCTION SET
112
GENERATE NEW ENCODING FOR COMPRESSED INSTRUCTION SET
114
STOP

F.G. 1

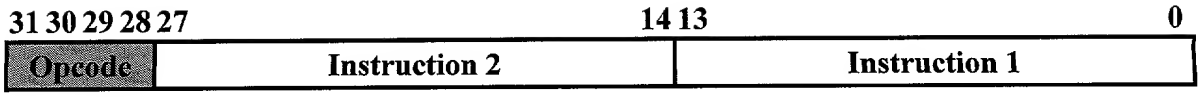
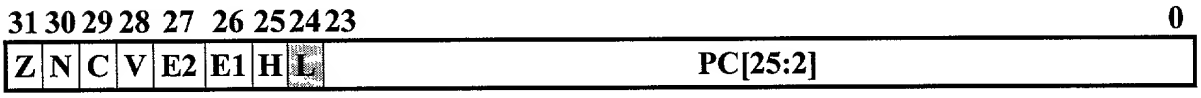

31 30 29 28 27
14 13
0
Opcode
Instruction 2
Instruction 1

Fig. 2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0
Z
N
C
V
E2
E1
H
L
PC[25:2]

Fig. 3

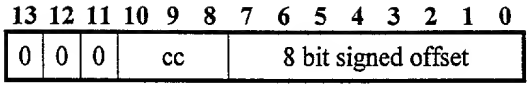


Fig. 4

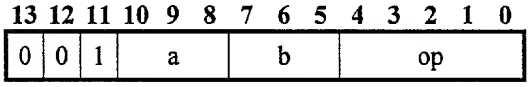


Fig. 5

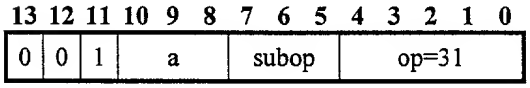


Fig. 6

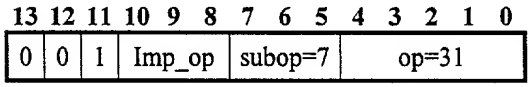


Fig. 7

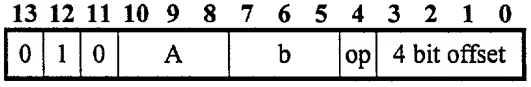


Fig. 8

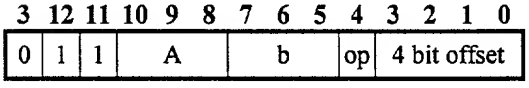


Fig. 9

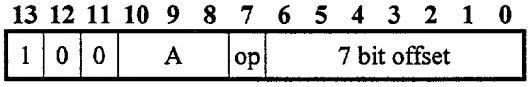


Fig. 10

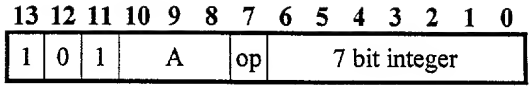


Fig. 11

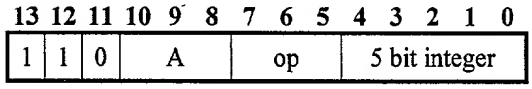


Fig. 12

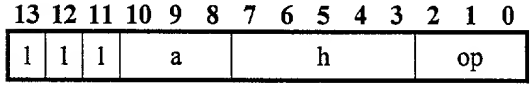


Fig. 13

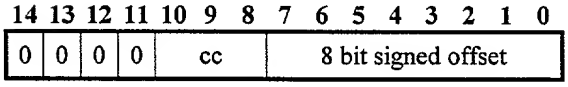


Fig. 14

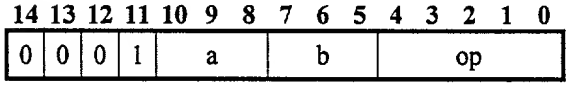


Fig. 15

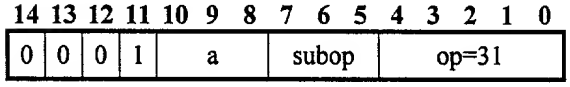


Fig. 16

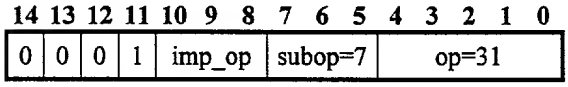


Fig. 17

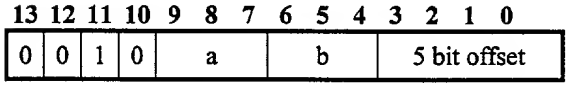


Fig. 18

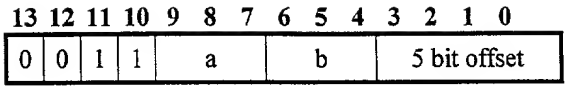
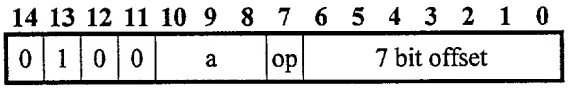


Fig. 19



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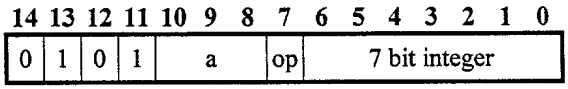
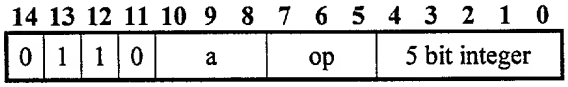


Fig. 21



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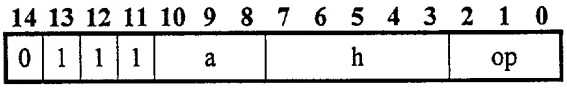

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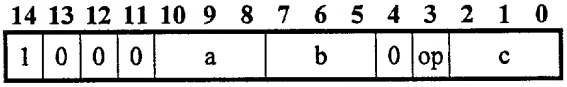

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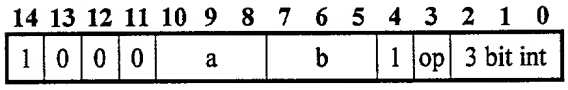

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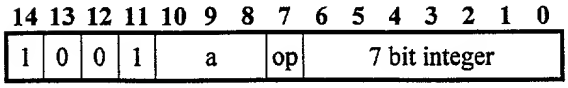

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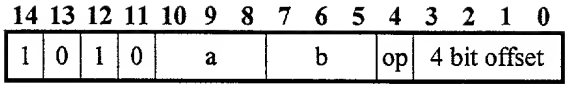
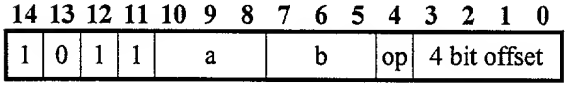


Fig. 27



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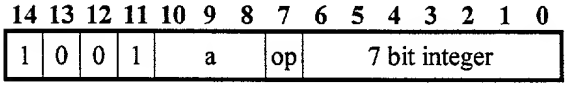

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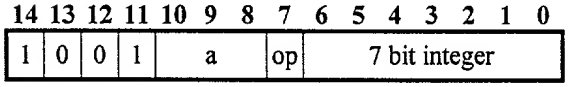


Fig. 30

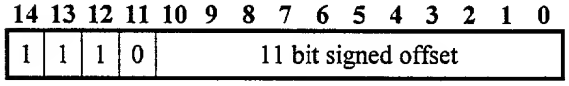


Fig. 31

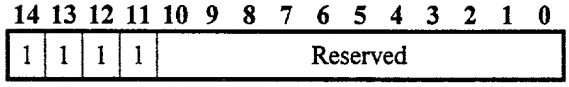
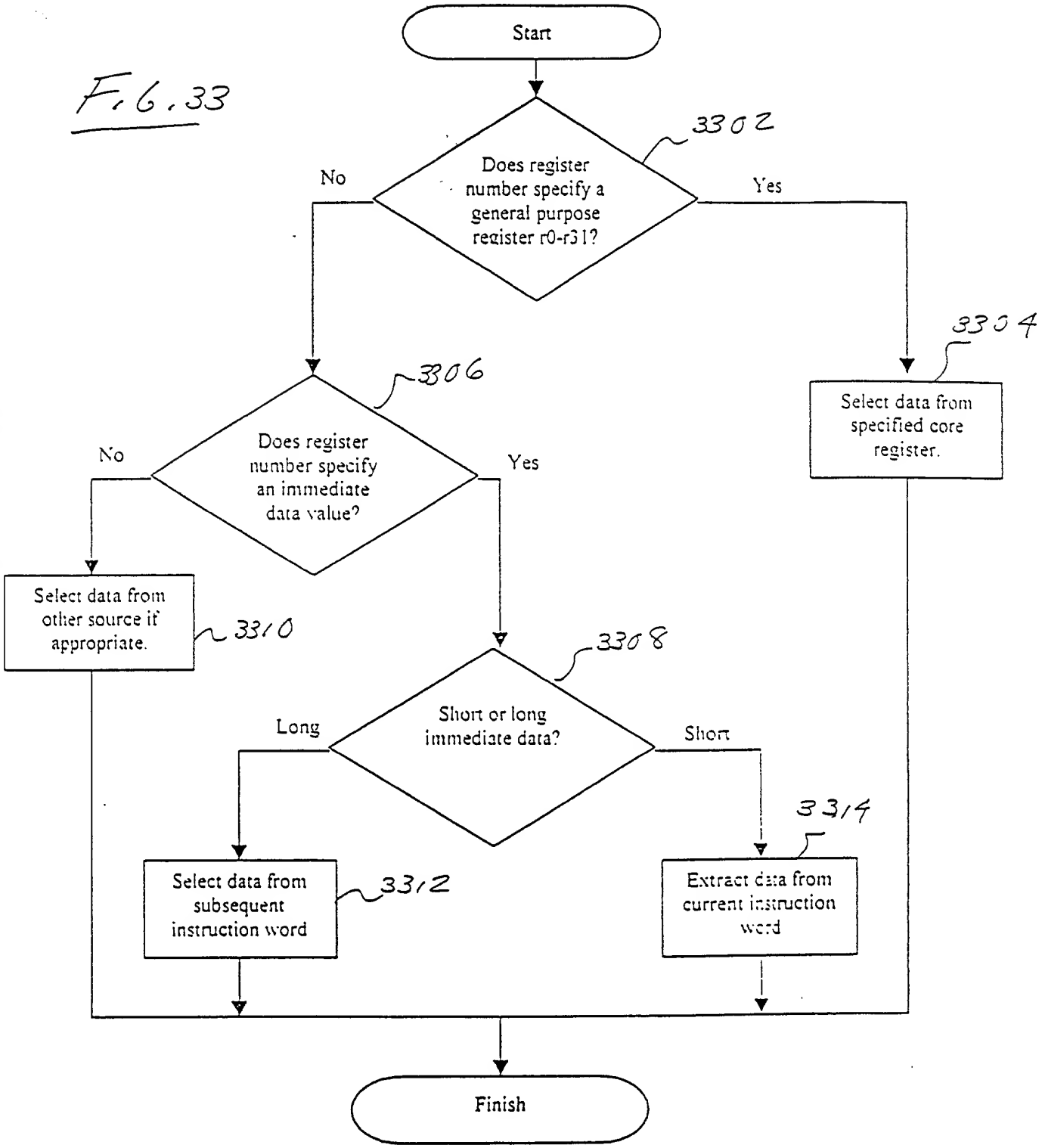
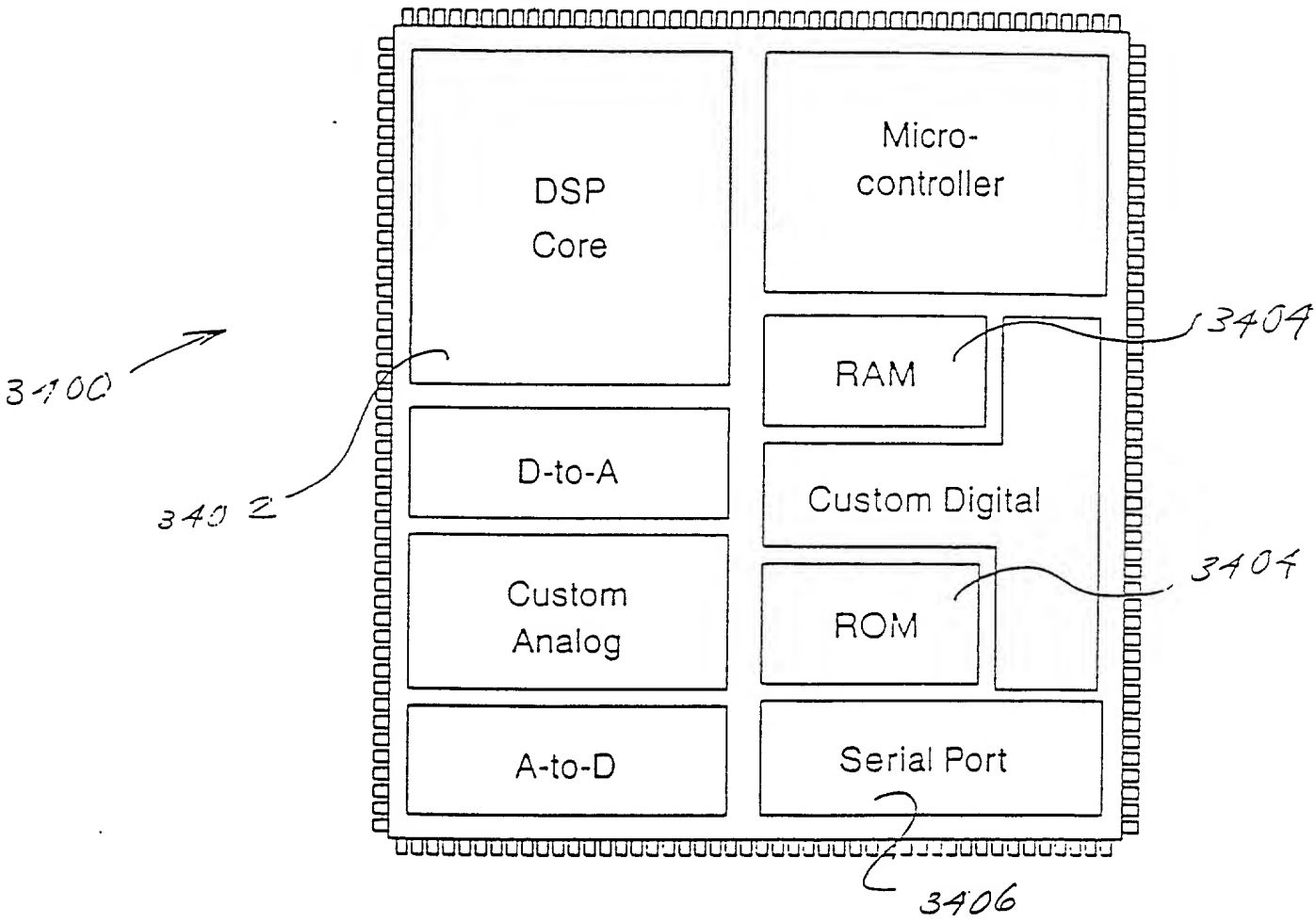


Fig. 32

Patent Application Publication

F.6.33

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3402
DSP Core
Micro-controller
RAM
3404
D-to-A
Custom Digital
Custom Analog
ROM
3404
A-to-D
Serial Port
3406

FIG. 34

PORTED: 6814809960

FIG. 35